

Tree/Shrub Planting



What is your plan?

Looking for a windbreak, wildlife habitat, or just want to plant trees? Depending on what your purpose is will make a difference where and what kind of trees to plant. Most common purposes for tree planting are:

- ☒ reduce winds
- ☒ shade an area
- ☒ control snow drifting
- ☒ wildlife habitat and/or food
- ☒ improve beauty and value of homesite
- ☒ screening for dust, noise, or privacy
- ☒ establish woody plants for forest products
- ☒ protection for gardens, orchards, or livestock

Once a purpose is determined, there are several factors that go into planning:

- ☒ What kind of soil is present?
- ☒ How much room is available?
- ☒ Is supplemental water needed and/or available?
- ☒ What kind of trees will work best?

Where to get help

Contact your local Natural Resources Conservation Service or Conservation District office for assistance. They can give you soil information, tree spacing, watering options, and specific tree information.

How to obtain trees

Conservation trees are available at the following locations: _____

Local nurseries are recommended for small quantity purchases but can become cost prohibitive on

large purchases.

Site preparation

Trees may be planted in various site conditions such as grass sod or clean tilled soil. Your time, budget, available equipment, etc., will be the key to determining site preparations. Grass sod is a good option that reduces weed control problems. If a tree planter will be used or weed barrier installed, plowing is necessary to loosen the soil. If possible, plow only the width of weed barrier (approximately seven feet) and leave grass sod between tree rows.

Care of planting stock

Bare root trees may be kept in the shipping packages for a week, provided they are stored in an unheated, cool area not subject to freezing. Check roots in the package and make sure they are

moist each day while storing. If the planting cannot be completed within two weeks, the trees should be heeled in as shown in Diagram 1. Although controversial, placing bare root trees in a five gallon bucket of water prior to planting may build up moisture in a tree that may help it survive transplant shock. However, damage to the tree may result if left in a bucket longer than two or three days. **Do not allow roots to become dry at anytime!**

Potted and large container or burlap trees generally need less care. Sprinkle or mist once a day to keep roots moist. Store in a cool area not subject to freezing.

When to plant

Trees should be planted while they are in the dormant stage, usually early December through March in Oklahoma. Avoid planting when ground is frozen. Even if soil moisture is good at planting, trees should be watered immediately after planting.

Tree planting tips

After site is prepared and tree stock has been well cared for; planting day will be successful if the following tips are followed:

- ☑ Use a five gallon water bucket to transport trees (bareroot). A relatively new product is available that we highly recommend; Polacrylamide is a plastic polymer that is available in crystal or powder form. We recommend using 1/3 pound of the powder form mixed with 4 gallons of water. After 20-30 minutes, it looks like a thick soup. The polymer/water mix has no nutrient value but clings to roots and reduces drying out. Your local conservation office can help you locate this product.

- ☑ Planting depth is important (see Diagram 2) as well as insuring that roots are not curved upward. Where power diggers are used, allow two to three inches for settling of soil in the hole. Bar planters, when used, must have ideal soil, soil moisture, and small tree stock to be successful. Where mechanical tree planters are available, someone is generally available to demonstrate how this machine operates.

- ☑ Drop in a fertilizer tablet for each tree. At planting is a convenient time to make nutrients available for the second years growth. Tablets can be placed 6-12 inches below ground surface and will release nutrients slowly.

Weed control

Anything growing near the trees is a weed and is robbing nutrients and moisture. Listed are two methods of weed control:

- ① Weed barrier fabric has been on the market for several years and is proving very valuable. The fabric commonly used in tree plantings is 6 feet wide. Trees should be planted first. Fabric is installed over the trees with an implement attached to a tractor. Tractor may be in the 60-80 horsepower range and needs to have wide tracking tires. Smaller tractors with narrow tracking should be avoided.

Advantages of weedbarrier

- ☑ Weedbarrier breaths - allowing for air & moisture to penetrate. Stored moisture under fabric reduces stress in dry periods.
- ☑ Fabric eliminates the number one enemy of tree survival and growth - competition. Grass and weeds are difficult to control around trees and rob nutrients

and moisture. People have good intention to control competition but usually tire of it. Fabric effectively removes competition around 5 years.

CAUTION: Do Not Use Weed Trimmers around trunk of trees.

- ☑ Fabric has consistently shown to greatly improve survival and growth of trees. Tree growth is generally twice that of trees without fabric.
- ☑ Once installed there is no follow-up maintenance.
- ② Herbicides with natural mulches - use of grass clippings, wheat straw, and other natural mulches two to three feet around base of tree is helpful. Mulch should be at least three inches thick to discourage weed sprouting. Herbicides are very useful to assist the mulch in weed control. Round-up is a safe contact herbicide if you're careful not to spray the tree. Round-up has been successfully used and does not transpire into the atmosphere like 2 4-D. Transpiring herbicides like 2 4-D and banvel should be avoided--even with no contact, these chemicals can kill trees as their vapors travel into the atmosphere. Pre-emergent herbicides like Glean, Ally, and Treflan should have labels checked very carefully.

Drip watering system

A drip watering system takes the "work" out of watering trees. It is very efficient. Drip systems are recommended in rainfall areas of less than 25 inches annually, but can be beneficial in higher rainfall areas during dry periods.

To insure tree survival and establishment of your trees, have someone with experience design a drip watering system to supply

supplemental water to the trees in absence of adequate soil moisture. Contact your local NRCS office for technical assistance on designing a drip watering system that fits your needs.

Due to the simplicity of operating the watering system, the common tendency has been to overwater trees the first year after planting. Overwatering drives air away from the soil around the tree roots and inhibits normal root development. (refer to Oklahoma Job Sheet JS 612 02 Checking Soil Moisture Available to Trees.)

Watering guidelines

First year

Generally, the system should be operated twenty-four hours one to two times a week depending on seasonal air temperatures, humidity, amount of wind, and number of rainless days.

Second year

Increase watering time to approximately twice that of the first year. Adjust watering based on temperature, humidity, wind, and drought.

Third and succeeding years

By this time your trees should be well established and able to tolerate short dry periods. Begin to water only when soil is dry to the point that it begins to show on surrounding native vegetation. Increase watering time approximately twice that of the

previous year. Run drip system for two or three days and then allow several days (four to eight) for soil to partially dry out. Residents on their own individual pump systems should be warned that drip watering systems will cause pumps to go on and off many times a day. A visit with your local well repair business is recommended. Some recommend turning on enough faucets to keep well running continuously while drip watering.

Other information

Begin watering your trees immediately after planting. In absence of adequate soil moisture, the first watering of the year should be done in the spring about the time the buds begin to swell or surrounding grass begins to green up. The last watering should be done after the first fall frost. Both waterings are important since they are during the periods of maximum root growth.

- ☒ Winterize your drip system each fall. Disconnect line, filter, and regulator from the water supply. Store filter and regulator. Drain water from lines and plug open ends.
- ☒ Flush lines before using in the spring.
- ☒ Watering at night particularly during hot weather decreases evaporation loss.
- ☒ Avoid water standing around the trunk of the tree. Arrange emitter further from the tree or arrange the emitter on the down slope side.

Long-term tree care

Other problems may occur such as:

- ☒ Animal/Rodent damage
- ☒ Insect & Disease damage
- ☒ Need for pruning

Your local conservationist may not be an 'expert' on all tree care issues. However, they can direct you to those places to get answers. Find below a listing of reference material:

Diseases of Trees in the Great Plains Riffle, Jerry W., & Glenn W. Paterson Forest Service General Technical Report RM-129, 1986

Common Insect Pests of Trees in the Great Plains, Nebraska Cooperative Extension Service EC 86-1548 (no date)

For pruning techniques and instructions, check with your local extension office. Many books are available that provide pruning and tree care information. One example:

How to Grow Fruits, Nuts, & Berries, By Sunset Lane Publishing Co., Menlo Park, California 94025

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Diagram 1

Heeled In

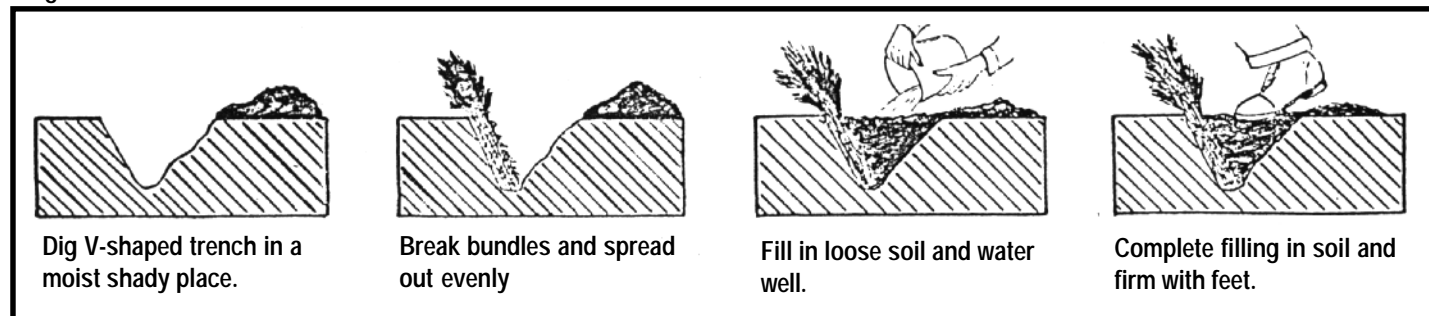
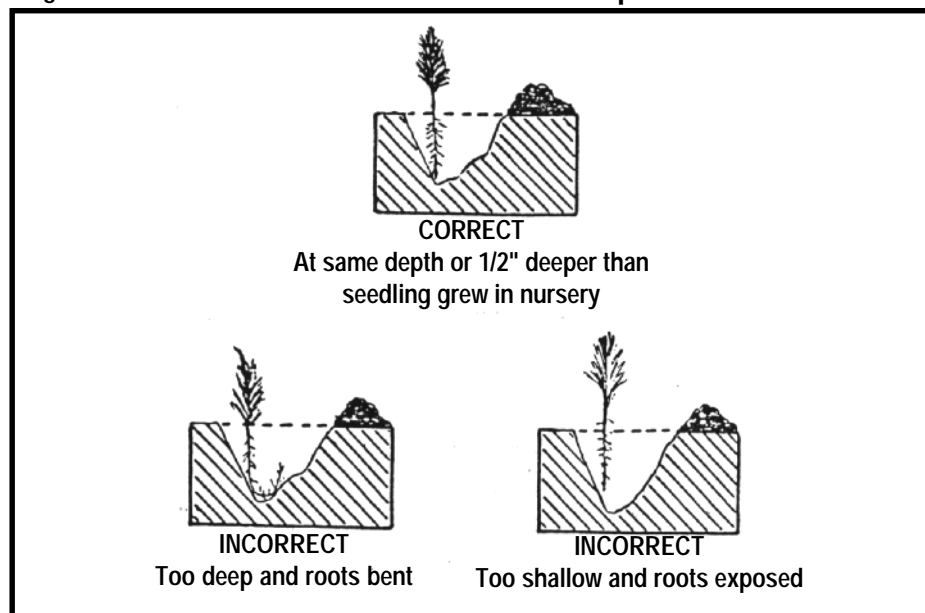


Diagram 2

Correct and Incorrect Depths



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